

**Fidelity of Administration and Scoring, Alternate Assessment:  
Science Administration Rater and Scoring Study**

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Kim Sherman  
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## **Executive Summary of Science Administration Score-Behind Pilot Study**

### ***Methodology***

Qualified Assessors and Qualified Trainers were solicited to volunteer for a pilot study of Alternate Assessment administration fidelity. Assessors who planned to administer the Science Alternate Assessment to 8<sup>th</sup> grade students who were not likely to require administration of the Expanded Levels of Support administration were requested.

### ***Administration Score-Behind***

The Qualified Assessor was observed administering the assessment to the student, and a Qualified Trainer, EED Program Manager, or DRA Project Manager scored the student simultaneously with the assessor as well as scored the administration techniques of the Qualified Assessor using the Administration Checklist. Copies of the Qualified Assessor's scoring protocol, the Qualified Trainer's scoring protocol, and the Qualified Trainer's assessment checklist were collected.

The scoring protocols were compared regarding item scoring. The Assessor's score was compared to the Qualified Trainer's score (Assessor to Observer), to the correct score (Assessor to Correct), and to the score that was later entered in the online data entry site (Assessor to Data Entry).

Thirteen Qualified Assessors volunteered to assess nineteen students. Five different Qualified Trainers served as observers. The 8<sup>th</sup> grade Science Alternate Assessment consists of 4 tasks with 6 items each, for a total of 456 possible items for comparison in each of three categories: The assessor's score to the observer's score, the assessor's score to the correct answer, and the assessor's score to the score entered online. The following table shows the percent of items that matched in each category.

**Table 1. Percent of Agreement in Science Assessment Administration**

	n	Error	Correct Percent
Assessor to Observer	443	3	0.9932
Assessor to Correct Answer	455	1	0.9978
Assessor to Data Entry	455	1	0.9978

Though a total of 456 items were possible, the observer was unable to see or hear the student's answer in fourteen instances. In a fifteenth instance, the assessor skipped an item, and so the observer was unable to score that item.

### ***Administration Checklist***

In addition to observing the administration of the Alaska Alternate Assessment, 8<sup>th</sup> grade science, observers were required to complete an administration checklist of the administration of the test. Issues of test material preparation, complete presentation of the assessment, scoring and data entry accuracy, and additional verification of student grade, special education status and eligibility to participate in the Alaska Alternate Assessment were investigated.

**Table 2. Administration Checklist**

Student	Valid	Correct	Incorrect	Percent Valid correct
Preparation	96	96	0	1.00
Intact Presentation	190	189	1	.99
Additional Verification	43	43	0	1.00
Scoring	63	56	7	.88
Data Entry	78	78	0	1.00
Total Test	470	462	8	.98

In addition to providing evidence of accurate and effective administration in the science assessment, the opportunity to observe the assessors as they manipulated the materials was

instructive. The item that was skipped by one assessor caused others to stumble or hesitate as they administered the assessment. That item will be improved in future iterations of the assessment.

### **Proposed Cycle of External Review of Qualified Assessors**

The following proposed cycle of annual review will be presented to the Alaska National Technical Advisory Committee in Spring 2010 for review and recommendation.

**Table 3. Planned Review Cycle**

<b>Test Cycle</b>	<b>Content Area</b>	<b>Review Of</b>	<b>Review Conducted By</b>
2009-2010	SCIENCE	Administration Checklist and Scoring Protocols	Mentors, EED, Vendor
2010-2011	WRITING	Writing Samples and Scoring Protocols	Mentors, EED, Vendor
2011-2012	MATHEMATICS	Administration Checklist and Scoring Protocols	Mentors, EED, Vendor
2012-2013	READING	Administration Checklist and Scoring Protocols	Mentors, EED, Vendor
Cycle Repeats			

### **Summary: Overall Statistics**

The following tables describe the number of times that any error or mismatch occurred between the assessor and the observer (Table 4), between the assessor and the correct score (Table 5), and between the assessor and the score that was entered online for a student (Table 6). These three tables look at the entire test per student, rather than at errors or mismatches on a per item basis.

**Table 4. Assessor/Observer Total Not Matching**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All Match	18	94.7	94.7	94.7
	1.00	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

**Table 5. Assessor Correct Response Total Not Matching**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All Match	18	94.7	94.7	94.7
	1.00	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

**Table 6. Assessor Data Entry Total Not Matching**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All Match	18	94.7	94.7	94.7
	1.00	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

userid	fname	lname	user_type	phone
763	Vickie	Coupchiak	Qualified Assessor	907-227-6557
432	Nancy	Elliott	Qualified Assessor	9075431987
764	Suzanne	Gresham	Qualified Assessor	742-8200
211	Donna	Huguelet	Qualified Assessor	907-260-2512
107	Dan	Kaasa	Qualified Mentor	907-714-8935
715	Tennille	Maacedo	Qualified Assessor	702-533-9558
314	Lynn	Marvel	Qualified Mentor	523-1766
367	Michelle	Oleske-Nicholai	Qualified Mentor	907 543 3154
765	Katherine (Katie)	Sandvik	Qualified Assessor	907-742-2350
526	Brian	Smith	Qualified Assessor	2067184937
223	Jarrett	Stoll	Qualified Assessor	7423600
299	Cheryl	stovner	Qualified Assessor	907-757-6014
158	Patricia (Patty)	Walkotte	Qualified Assessor	907-488-2271
302	Karen	Zane	Qualified Assessor	907-929-7695
184	Monique	Christiansen	Qualified Assessor	9077614370
236	Mitch	Steele	Qualified Assessor	9073527500
494	Dale	Sweetser	Qualified Mentor	907 746 9271

street address	city	state	zip	email
6313 E 32nd Apt. 2	Anchorage	AK	99504	vicnboz@hotmail.com
PO Box 765	Bethel	AK	99559	nancy_elliott@lksd.org
15800 Golden View Dr	Anchorage	AK	99516	gresham_suzanne@asdk12.org
148 N. Binkley	Soldotna	AK	99669	dhuguelet@kpbsd.k12.ak.us
148 North Binkley Street	Soldotna	AK	99669	dkaasa@kpbsd.k12.ak.us
28 Farewell Ave #c	Fairbanks	AK	99701	tennille.macedo@northstar.k12.ak.us
10014 Crazy Horse Drive	Juneau	AK	99803	lynn_marvel@jsd.k12.ak.us
Box 2101	Bethel	AK	99559	michelle_oleske@lksd.org
2220 Nichols St	Anchorage	AK	99508	Sandvik_Katie@asdk12.org
1226 Nelchina St	Anchorage	AK	99501	smith_brian@asdk12.org
9601 Lee St.	Eagle River	AK	99577	stoll_jarrett@asdk12.org
#9 teacher housing	Kwethluk	AK	99621	cheryl_stovner@lksd.org
2716 Beech	North Pole	AK	99705	pwalkotte@northstar.k12.ak.us
4535 Klondike Court	Anchorage	AK	99508	zane_karen@asdk12.org
1159 S. Chugach St.	Palmer	AK	99645	monique.christiansen@matsuk12.us
p.o. box 876398	wasilla	AK	99687	mitch.steele@matsuk12.us
404 Gulkana	Palmer	AK	99645	dale.sweetser@matsuk12.us

district	school	number	last login
Anchorage Schools	Clark Middle School	30	4/12/10
Lower Kuskokwim Schools	Bethel Regional High School	38	4/5/10
Anchorage Schools	Goldenview Middle School	28	4/1/10
Kenai Peninsula Borough Schools	Soldotna Middle School	43	4/8/10
Kenai Peninsula Borough Schools	Soldotna Middle School	193	4/14/10
Fairbanks North Star Borough Schools	Tanana Middle School	7	3/30/10
Juneau Borough Schools	Juneau-Douglas High School	56	4/16/10
Lower Kuskokwim Schools	Z. John Williams Memorial School	64	4/16/10
Anchorage Schools	Whaley School	6	
Anchorage Schools	Whaley School	20	4/13/10
Anchorage Schools	Gruening Middle School	62	4/14/10
Lower Kuskokwim Schools	Ket'acik/Aapalluk Memorial School	40	3/11/10
Fairbanks North Star Borough Schools	North Pole Middle School	41	4/8/10
Anchorage Schools	Wendler Middle School	58	3/31/10
Mat-Su Borough Schools	Palmer Middle School	17	3/24/14
Mat-Su Borough Schools	Teeland Middle School	31	4/9/14
Mat-Su Borough Schools	Colony Middle School	92	4/8/14



Greetings, Mentors!

We are going to conduct a little study and are looking for volunteers.

The study will use one of the training materials, the *Administration Checklist*, that you were provided for training your protégés. What the study will do is make use of that Checklist during an actual test administration of science.

We would ideally like to have 10 teams in each grade level (4, 8, and 10). A team will consist of an observer (mentor), Qualified Assessors, and a student. Kim Sherman and I will also be available to help with observations. Ideally, we would like you to select a Qualified Assessor or two to participate. You and the QA will choose a student. Try to locate a student who will not be unduly distracted by the presence of the mentor/observer in the room. I look on this as a learning experience and not a heavy-handed undertaking for you and your protégés. Consider people who will also be interested in trying something new. I really enjoyed, and learned a lot, from the observations I did last year and found it very valuable to see how the assessment plays out with students and assessors in the field.

District and participants will remain anonymous in study results. The results of observations will guide us in refining mentor training.

I will resend this information after the holiday break, but just wanted you to start thinking about it before you leave. (If anyone has trouble viewing the attachment, please let me know, and I'll resend. I also cut and pasted the word document below my signature so you can read it.)

If a mentor is also a teacher and needs a substitute for that 1-2 hours of observation, EED will pay.

After a very successful mentor training in which you provided us tons of information, I'm really looking forward to working with you on this project!

*Thank you,*

*Aran Felix, Alternate Assessment Program Manager  
Alaska Department of Education & Early Development  
801 West 10th Street, Suite 303  
P. O. Box 110500  
Juneau, AK 99811-0500  
(907) 465-8437 (voice)  
(907) 465-8400 (fax)*

EED Letterhead

**PARENT/GUARDIAN NOTIFICATION LETTER**  
Alaska Science Alternate Assessment 2010

Dear Parent or Guardian:

As specified in your child's Individualized Education Program, your student is eligible to take the Alternate Assessment. As an eighth grader, your child takes the Science Alternate Assessment as well as reading, writing, and mathematics alternate assessments. The Alternate Assessments are part of the required statewide system of assessment.

We are pleased to tell you that your child and the Qualified Assessor assigned to administer the alternate assessments have been selected to participate in a pilot study of Alternate Assessment Raters. A qualified Mentor-Trainer, (or other trained observer such as the Alternate Assessment Program Manager or test vendor staff), will observe the Qualified Assessor administering and scoring the Science Alternate Assessment.

Prior to administering and scoring the alternate assessments, Qualified Assessors complete a rigorous training program which includes online training modules, passing proficiency tests, and administering a practice test that is evaluated and scored by a qualified trainer. The purpose of this study is to provide assurance to the United States Department of Education that Alaska's Qualified Assessors continue to administer tests correctly and score items accurately when giving tests to their students during the assessment window (March 1 – April 16, 2010).

Student names and student scores remain confidential for purposes of this study.

If you would like to have additional information about this study, please contact me at 907-465-8437, or email: [aran.felix@alaska.gov](mailto:aran.felix@alaska.gov).

Sincerely,

A handwritten signature in dark ink, appearing to read 'Aran Felix', is positioned above the typed name.

(Ms) Aran Felix  
Alternate Assessment Program Manager

## Administration Checklist Science Alternate Assessment

Team Number \_\_\_\_\_ Observer Name \_\_\_\_\_

Student Name: \_\_\_\_\_

Student Grade: \_\_\_\_\_ Student Disability or Code \_\_\_\_\_

Parent Notification Letter sent \_\_\_\_\_

Qualified Assessor Name \_\_\_\_\_

District Name \_\_\_\_\_ School Name \_\_\_\_\_

Rating Scale		
NO Score of 0	YES Score of 1	NA
Inconsistent demonstration of required skill.	Consistent demonstration of required skills.	Not applicable.

**Step 1 –Preparation:** The following series of questions can be asked to ensure that the student materials, scoring protocols, and the environment are appropriately prepared ahead of time. Did the Qualified Assessor (QA):

Please circle your choice using the Rating Scale above.

- |   |   |     |   |
|---|---|-----|---|
| Y | N | N/A | Print student materials for the appropriate grade level?  |
| Y | N | N/A | Print on paper with the correct size and contrast?  |
| Y | N | N/A | Cut up and arrange (as needed) for the student?   |
| Y | N | N/A | Assemble with needed support materials? (e.g., assistive devices, manipulatives, scratch forms)                         |
| Y | N | N/A | IEP verification of appropriate accommodation/assistive technology  |
| Y | N | N/A | Verification that accommodations/assistive technology have been used during instruction prior to use during assessment. |

Accommodations listed on IEP: \_\_\_\_\_

\_\_\_\_\_

Accommodations used during assessment: \_\_\_\_\_

\_\_\_\_\_

Assistive technology listed on IEP: \_\_\_\_\_

Assistive technology used during assessment: \_\_\_\_\_

Additional Information:

***Step 2 – Additional Verification:*** Ask the *Qualified Assessor* if they:

Y	N	N/A	Completed the online training modules prior to proficiency modules?
#: _____			How many science proficiency tests (or retests) did they need to achieve proficiency? (Note: EED/DRA can research this information for you).
Y	N	N/A	Have submitted a copy of the Test Security Agreement to the District Test Coordinator and retained a copy for their files?

Additional Information:

***Step 3 – Interactive Presentation:*** Use the following guidelines to ensure the Qualified Administer (QA) is conducting the assessment appropriately by detailing the following:

Y	N	Student-Assessors Positioning – Position of the QA with the student (in front, on the side) to assist or help the student manage materials.
Y	N	Materials Placement with Student – Presentation of the materials at the appropriate pace (speed of speaking and lay out of materials).
Y	N	Student not distracted by scoring of protocol.
Y	N	Student not distracted by observer.
Y	N	Directions read correctly to student – Use of correct specific directions in reference to the appropriate student materials.
Y	N	N/A Example (if available) read correctly to student.
Y	N	Item (prompt) read correctly to student.

- |   |   |     |  |
|---|---|-----|--|
| Y | N | N/A | Appropriate Rereading/Re-prompting as needed.  |
| Y | N |     | Pacing   |
| Y | N |     | Correct supports and reinforcement given – (Appropriate reinforcement to acknowledge ‘on-task’ behavior’ but without providing any assistance for correct responses) |
| Y | N |     | Appropriate accommodations/assistive technology/adaptations (if needed) used   |

Additional Information:

**Step 4 – Scoring:** The QA scores the student’s responses concurrently with the test being given. The observer will review the Scoring Protocols after test administration and address the following issues:

Please circle your choice using the Rating Scale above.

- |   |   |     |   |
|---|---|-----|---|
| Y | N |     | Did the student’s verbatim response get transcribed on the scoring protocol or a checkmark or plus sign (✓, +) to indicate student gave the correct answer?   |
| Y | N | N/A | Were appropriate notes placed on the scoring protocol as needed?  |
| Y | N |     | Were the correct points awarded for responses to reflect (a) incorrect, (b) partially correct, and (c) completely correct at the time of test administration? |
| Y | N |     | Is the scoring protocol stored in a secure place?   |

Additional Information:

**Step 5 – Data Entry:** After the test has been administered, the QA needs to enter the scores into the computer database. To ensure accurate data entry, it is useful if the following issues are addressed by reviewing the entire protocol with the data entry screen:

Please circle your choice using the Rating Scale above.

- |   |   |     |   |
|---|---|-----|---|
| Y | N |     | Accurate demographics: spelling of name, correct state student identification number, date of birth, and correct grade level. |
| Y | N |     | Entered accurate item values.   |
| Y | N | N/A | Entered any reasons not tested if applicable.   |
| Y | N | N/A | Entered types of accommodations and assistive technology used.  |
| Y | N | N/A | Saved and submitted scores indicating record is complete.   |
| Y | N | N/A | Unofficial student report consistent with the scoring protocol.   |

Additional Information:

**Total Scores for all sections** \_\_\_\_\_

\_\_\_\_\_  
Signature of Qualified Assessor/Observer

\_\_\_\_\_  
Date

**Please submit this *Administration Checklist* with all required materials as listed above to:**

*Aran Felix, Alternate Assessment Program Manager  
Alaska Department of Education & Early Development  
801 West 10th Street, Suite 303  
P. O. Box 110500  
Juneau, AK 99811-0500*

***Note on the scoring of the Administration Checklist***

Each item will be tallied across raters to document the reliability of the item on the Checklist. This information will be used to address training components in the fall by adding in additional materials focused on specific issues. Each person will be totaled across all elements. This information allows EED to qualify the certification process and match the web training to the live training.

Note: Though the observation checklist is divided into different phases and components of the entire administration-scoring cycle, no sub-areas are being reported because of the inherent differences among the sub-areas and the base rate that makes a sub-area score fragile.

## Evaluation for Science Alternate Assessment Rater Study

Conducted Spring 2010

We very much appreciate your participation in this pilot study. In order to improve any future observations or studies that we pursue in the future, we value your feedback.

Name and district information is completely optional.

Observer Name \_\_\_\_\_ Observer District \_\_\_\_\_

- |   |                     |
|---|---------------------|
| 1) Were the materials useful?                 | _____ Yes _____ No. |
| 2) Did the materials arrive on time?          | _____ Yes _____ No. |
| 3) Was the Parent Letter sufficient?          | _____ Yes _____ No. |
| 4) Were the procedural instructions clear?    | _____ Yes _____ No. |
| 5) Was the Administration Checklist complete? | _____ Yes _____ No. |
| 6) Are there other questions we should add?   | _____ Yes _____ No. |

Please explain:

- |   |                     |
|---|---------------------|
| 7) Overall, was this a useful exercise? | _____ Yes _____ No. |
|---|---------------------|

Please explain:

- |   |                     |
|---|---------------------|
| 8) Are there any changes you would like to recommend? | _____ Yes _____ No. |
|---|---------------------|

Please explain.

- |   |                     |
|---|---------------------|
| 9) Were there any issues with your Qualified Assessors? | _____ Yes _____ No. |
|---|---------------------|

Please explain.

- |  |                     |
|--|---------------------|
| 10) Were there any logistical issues that you encountered? | _____ Yes _____ No. |
|--|---------------------|

Please explain.